#### **Online Supplement to**

# Cardiac proteasome functional insufficiency plays a pathogenic role in diabetic

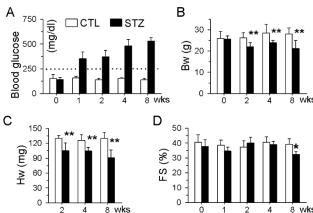
### cardiomyopathy

Li, PA28α overexpression improves diabetic cardiomyopathy

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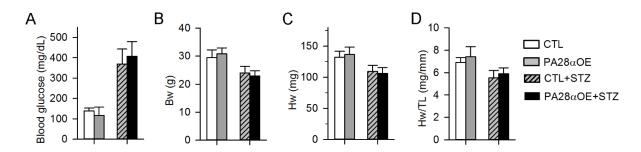
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#### **Supplemental Figure 1**



**Supplemental figure 1, related to Figure 1.** Generation of STZ-induced diabetic mouse models. GFPdgn male mice received 5 daily STZ (50 mg/kgBw, Diabetic) or vehicle (CTL) injections. **A**, Blood glucose level reached the criteria for the diagnosis of diabetes (250 mg/dl) 1 week after STZ-treatment and was sustained thereafter. **B-C**, STZ-treatment led to loss of body weight (Bw) (**B**) and heart weight (Hw) (**C**). **D**, Echocardiography detected diminished fraction shortening (FS) at 8 weeks after STZ-treatment, indicating impaired cardiac function. n=6~8 per group. \*P< 0.05, \*\*P<0.01 versus CTL.

## **Supplemental Figure 2**



Supplemental figure 2, related to Figure 5-6. PA28αOE did not alter cardiac mass in diabetic mice. Diabetes was induced in tTA (CTL) and tTA/PA28α (PA28αOE) mice with 5 consecutive daily injections of STZ for 8 weeks. A, Blood glucose levels after overnight fasting. B-D, Changes of body weight (Bw) (B), heart weight (Hw) (C) and Hw to tibial length (TL) ratio (D) at 8 weeks after STZ injections.